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JAN E G COOT IN	APPLICANT:	
	Liang and Woodward	
INFORMATION DISCOSURE STATEMENT BY APPLICANT RADE	FILING DATE:	GROUP: Unassigned
APPLICANT RADE TO	July 14, 2003	CONFIRMATION NO.: Unassigned

## U.S. PATENT DOCUMENTS

EXAM. INITIALS	/	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE
7/	$\overline{}$	5,869,281	2/9/99	Abramovitz et al.	435	69.1	6/25/93
9		6,329,426	12/11/01	Ueno ·	514	530	12/28/98
8/	$\overline{}$	6,416,972	7/9/02	Lake et al.	435	69.1	6/23/97
3		6,492,417	12/10/02	Sharif et al.	514	530	12/14/98
9		6,511,999	1/28/03	Burk et al.	514	374	2/8/02
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## FOREIGN PATENT DOCUMENTS

EXAM. INITIALS		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION (YES/NO)
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	<del></del>	.,,			<del></del>		
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages)

	Abramovitz et al., "Cloning and expression of a cDNA for the human prostanoid FP receptor," J. Biol. Chem. 269:2632-2636 (1994).
2	Anderson et al., "Prostaglandin $F_{2\alpha}$ receptor in the corpus luteum: Recent information on the gene, messenger ribonucleic acid, and protein," Biology of Reproduction 64:1041-1047 (2001).
2	Anderson et al., "Prostaglandin moieties that determine receptor binding specificity in the bovine corpus luteum," J. Reprod. Fertil. 116:133-141 (1999).
N	Betz et al., "Genomic structure, 5' flanking sequences, and precise localization in 1P31.1 of the human prostaglandin F receptor gene,"  Biochem. Biophys. Res. Commun. 254:413-416 (1999).
2	Bhattacharya et al., "Nuclear prostaglandin receptors," Gene Ther. Mol. Biol. 4:323-338 (1999).

EXAMINER DATE CONSIDERED -- Page 1 of 4-

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

2	Boiti et al., "Nitric oxide synthase activity and progesterone release by isolated corpora lutea of rabbits in the early and mid-luteal phases of pseudopregnancy are modulated differently by prostaglandin E-2 and prostaglandin F-2alpha via adenylate cyclase and phospholipase C,"  J. Endocrinol. 164:179-186 (2000).
	Carrasco et al., "Activation of the prostaglandin FP receptor in human granulosa cells," J. Reprod. Fertil. 111:309-317 (1997).
2	Chen et al., "Prostaglandin F2alpha stimulates the Raf/MEK1/mitogen-activated protein kinase signaling cascade in bovine luteal cells,"  Endocrinology 139:3876-3885 (1998).
d.	Davis et al., "Prostaglandin F2 alpha stimulates phosphatidylinositol 4,5-bisphosphate hydrolysis and mobilizes intracellular Ca2+ in bovine luteal cells," <a href="Proc. Natl. Acad. Sci. USA">Proc. Natl. Acad. Sci. USA</a> 84:3728-3732 (1987).
2	Duncan et al., "Chromosomal localization of the human prostanoid receptor gene family," <a href="Memorias 25:740-742">Genomics</a> 25:740-742 (1995).
2	Ezashi et al., "Genomic organization and characterization of the gene encoding bovine prostaglandin F2alpha receptor," <a href="Gene">Gene</a> 190:271-278 (1997).
2	Fu et al., "Peroxisome proliferator-activated receptor gamma inhibits transforming growth factor beta-induced connective tissue growth factor expression in human aortic smooth muscle cells by interfering with Smad3," J. Biol. Chem. 276:45888-45894 (2001).
2	Fujino et al., "Delayed reversal of shape change in cells expressing $FP(_B)$ prostanoid receptors. Possible role of receptor resensitization," <u>J. Biol. Chem.</u> 275:29907-29914 (2000).
a	Graves et al., "Cloning of a receptor for prostaglandin F2 alpha from the ovine corpus luteum," <a href="Endocrinology">Endocrinology</a> 136:3430-3436 (1995).
2	Griffin et al., "FP prostaglandin receptors mediating inositol phosphates generation and calcium mobilization in Swiss 3T3 cells: A pharmacological study," J. Pharmacol. Exp. Ther. 281:845-854 (1997).
2	Gusovsky, "Prostaglandin receptors in NIH 3T3 cells: Coupling of one receptor to adenylate cyclase and of a second receptor to phospholipase C," Mol. Pharmacol. 40:633-638 (1991).
2	Hasumoto et al., "Characterization of the mouse prostaglandin F receptor gene: A transgenic mouse study of a regulatory region that controls its expression in the stomach and kidney but not in the ovary," Genes Cells 2:571-580 (1997).
2	Ishikawa et al., "Mapping of the genes encoding mouse prostaglandin D, E, and F and prostacyclin receptors," <a href="Mapping">Genomics</a> 32:285-288 (1996).
2	Juengel et al., "Regulation of steady-state concentrations of messenger ribonucleic acid encoding prostaglandin F2 alpha receptor in ovine corpus luteum," <u>Biol. Reprod.</u> 54:1096-1102 (1996).
2	Kiriyama et al., "Ligand binding specificities of the eight types and subtypes of the mouse prostanoid receptors expressed in Chinese hamster ovary cells," Br. J. Pharmacol. 122:217-224 (1997).
2	Kitanaka et al., "Cloning and expression of a cDNA for rat prostaglandin F2 alpha receptor," <a href="Prostaglandins">Prostaglandins</a> 48:31-41(1994).
2	Lake et al., "Cloning of the rat and human prostaglandin F2 alpha receptors and the expression of the rat prostaglandin F2 alpha receptor," FEBS Lett. 355:317-325 (1994).
	_

2	Liang et al., "Comparison of PGF2α, Bimatoprost (prostamide) and butaprost (EP2 agonist) on Cyr61 and CTGF gene expression," J. Biol. Chem. 278:27267-27277 (2003).
2	Liu et al., "PLD activation in Chinese hamster ovary (CHO) cells transfected with PGF2 alpha receptor cDNA," <u>Prostaglandins</u> 51:233-248 (1996).
2	Narumiya and FitzGerald, "Genetic and pharmacological analysis of prostanoid receptor function," <u>J. Clin. Invest.</u> 108:25-30 (2001).
2	Niswender et al., "Mechanisms controlling the function and life span of the corpus luteum," <a href="Physiol. Rev.">Physiol. Rev.</a> 80:1-29 (2000).
2	Ogawa et'al., "Structural organization and chromosomal assignment of the human prostacyclin receptor gene," <a href="Maintenance"><u>Genomics</u></a> 27:142-148 (1995).
( )	Pierce and Regan, "Prostanoid receptor heterogeneity through alternative mRNA splicing," <u>Life Sciences</u> 62:1479-1483 (1998).
N	Pierce et al., "Activation of FP prostanoid receptor isoforms leads to Rho-mediated changes in cell morphology and in the cell cytoskeleton," <u>J. Biol. Chem.</u> 274:35944-35949 (1999).
V	Pierce et al., "Cloning of a carboxyl-terminal isoform of the prostanoid FP receptor," J. Biol. Chem. 272:883-887 (1997).
2	Sakamoto et al., "Expression of mRNA encoding the prostaglandin F2 alpha receptor in bovine corpora lutea throughout the oestrous cycle and pregnancy," J. Reprod. Fertil. 103:99-105 (1995).
2	Sakamoto et al., "Molecular cloning and expression of a cDNA of the bovine prostaglandin F2 alpha receptor," <u>J. Biol. Chem.</u> 269:3881-3886 (1994).
N	Sakamoto et al., "Prostaglandin F2 alpha receptor," J. Lipid Mediat. Cell Signal 12:405-411 (1995).
	Stjernschantz et al., "Microvascular effects of selective prostaglandin analogues in the eye with special reference to latanoprost and glaucoma treatment," <a href="Prog. Retin. Eye Res.">Prog. Retin. Eye Res.</a> 19:459-496 (2000).
2	Sugimoto et al., "Cloning and expression of a cDNA for mouse prostaglandin F receptor," J. Biol. Chem. 269:1356-1360 (1994).
N.	Susanna et al., "Current status of prostaglandin theory: Latanoprost and unoprostone," Surv. Ophthalmol. 47:S97-104 (2002).
~	Taketo et al., "Mapping of the genes encoding mouse thromboxane A2 receptor and prostaglandin E receptor subtypes EP2 and EP3," Genomics 19:585-588 (1994).
1	Tsai et al., "Distinct mechanisms regulate induction of messenger ribonucleic acid for prostaglandin (PG) G/H synthase-2, PGE (EP3) receptor, and PGF2 alpha receptor in bovine preovulatory follicles," <u>Endocrinology</u> 137:3348-3355 (1996).
2	Tsai et al., "Regulation of prostaglandin F2 alpha and E receptor mRNA by prostaglandin F2 alpha in ovine corpora lutea," J. Reprod. Fertil. 114:69-75 (1998).
N	Tsai and Wiltbank, "Prostaglandin F2 alpha regulates distinct physiological changes in early and mid-cycle bovine corpora lutea," <u>Biol. Reprod.</u> 58:346-352 (1998).
$\sim$	Uemura et al., "Identification of a new enhancer in the promoter region of human TR3 orphan receptor gene. A member of steroid receptor superfamily," J. Biol.Chem. 270:5427-5433 (1995).

1

Page 3 of 4-

4/21/66

	Weinreb et al., "Effects of prostaglandins on the aqueous humor outflow pathways," <u>Surv. Ophthalmol.</u> 47:S53-64 (2002).
8	Wiltbank et al., "Hormonal regulation of free intracellular calcium concentrations in small and large ovine luteal cells," <u>Biol. Reprod.</u> 41:771-778 (1989).
2	Woodward et al., "The molecular biology and ocular distribution of prostanoid receptors," <u>Surv. Ophthalmol.</u> 41:S15-21 (1997).
2	Woodward and Lawrence, "Identification of a single (FP) receptor associated with prostanoid-induced Ca2+ signals in Swiss 3T3 cells," Biochem. Pharmacol. 47:1567-1574 (1994).
	Genbank Accession No. AAB36298
a	Genbank Accession No. AAL36977
1	Genbank Accession No. AB083784
	Genbank Accession No. AB083785
	Genbank Accession No. AB083786
	Genbank Accession No. AB083787
	Genbank Accession No. AB083788
2	Genbank Accession No. AL136324.6
D.	Genbank Accession No. BAA20871
2	Genbank Accession No. BG196146
8	Genbank Accession No. BG199710
	Genbank Accession No. BG208551
	Genbank Accession No. BG209077
2	Genbank Accession No. BG218035
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7	Genbank Accession No. NM_0,00959
	Genbank Accession No. NP_037247
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2	Genbank Accession No. Q28905